

attach #8



SEQUENCE LISTING

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NOV 24 2001

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<110> MERISTEM THERAPEUTICS S.A.

<120> Pancreatic Lipases and/or Recombinant Colipases and  
Derived Polypeptides Produced by Plants, Methods for  
Obtaining Them and Use Thereof.

<130> 1074-1168PCT-US octobre 2000

<140> US 09/284,697

<141> 1999-04-19

<150> PCT/FR97/01862

<151> 1997-10-17

<160> 16

<170> PatentIn Ver. 2.1

<210> 1

<211> 69

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Signal peptide

<220>

<221> misc\_feature

<222> (1)..(69)

<223> Signal peptide of Sporamine A of Sweet potato

<220>

<221> CDS

<222> (1)..(69)

<300>

<303> J. Biol. Chem.

<304> 264

<306> 20042-20048

<307> 1989

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Met Lys Ala Phe Thr Leu Ala Leu Phe Leu Ala Leu Ser Leu Tyr Leu  
1 5 10 15

ctg ccc aat cca gcc cat tcc 69  
Leu Pro Asn Pro Ala His Ser  
20

<210> 2

<211> 23

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence:Signal peptide

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Met Lys Ala Phe Thr Leu Ala Leu Phe Leu Ala Leu Ser Leu Tyr Leu  
1 5 10 15

Leu Pro Asn Pro Ala His Ser  
20

<210> 3

<211> 111

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Signal peptide

<220>

<221> sig\_peptide

<222> (1)..(111)

<223> Signal peptide PPS of Sporamine A of Seet potato.

<220>

<221> CDS

<222> (1)..(111)

<300>

<303> J. Biol. Chem.

<304> 264

<306> 20042-20048

<307> 1989

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atg aaa gcc ttc aca ctc gct ctc ttc tta gct ctt tcc ctc tat ctc 48  
Met Lys Ala Phe Thr Leu Ala Leu Phe Leu Ala Leu Ser Leu Tyr Leu  
1 5 10 15

ctg ccc aat cca gcc cat tcc agg ttc aat ccc atc cgc ctc ccc acc 96  
Leu Pro Asn Pro Ala His Ser Arg Phe Asn Pro Ile Arg Leu Pro Thr  
20 25 30

aca cac gaa ccc gcc 111  
Thr His Glu Pro Ala  
35

<210> 4

<211> 37

<212> PRT

<213> Artificial Sequence

<223> Description of Artificial Sequence:Signal peptide

<400> 4

Met Lys Ala Phe Thr Leu Ala Leu Phe Leu Ala Leu Ser Leu Tyr Leu  
1 5 10 15

Leu Pro Asn Pro Ala His Ser Arg Phe Asn Pro Ile Arg Leu Pro Thr  
20 25 30

Thr His Glu Pro Ala  
35

<210> 5  
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<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Signal peptide

<220>  
<221> sig\_peptide  
<222> (1)..(66)  
<223> Signal peptide of rappbit gastric lipase

<220>  
<221> CDS  
<222> (1)..(66)

<400> 5  
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Met Trp Val Leu Phe Met Val Ala Ala Leu Leu Ser Ala Leu Gly Thr  
1 5 10 15

aca cat ggt ctt ttt gga 66  
Thr His Gly Leu Phe Gly  
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<210> 6  
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<212> PRT  
<213> Artificial Sequence  
<223> Description of Artificial Sequence:Signal peptide

<400> 6  
Met Trp Val Leu Phe Met Val Ala Ala Leu Leu Ser Ala Leu Gly Thr  
1 5 10 15

Thr His Gly Leu Phe Gly  
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<210> 7  
<211> 48  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Signal peptide

<220>

<221> sig\_peptide

<222> (1)..(48)

<223> Signal peptide of PSHPL.

<220>

<221> CDS

<222> (1)..(48)

<223> The cleavage sequence between the two sequences  
coding for PSPHPL and HPL is Gly-Lys.

<400> 7

atg	ctg	cca	ctt	tgg	act	ctt	tca	ctg	ctg	ctg	gga	gca	gta	gca	gga	48
Met	Leu	Pro	Leu	Trp	Thr	Leu	Ser	Leu	Leu	Leu	Gly	Ala	Val	Ala	Gly	
1				5				10				15				

<210> 8

<211> 16

<212> PRT

<213> Artificial Sequence

<223> Description of Artificial Sequence:Signal peptide

<400> 8

Met	Leu	Pro	Leu	Trp	Thr	Leu	Ser	Leu	Leu	Leu	Gly	Ala	Val	Ala	Gly
1				5				10				15			

<210> 9

<211> 66

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Signal peptide

<220>

<221> sig\_peptide

<222> (1)..(66)

<223> Signal peptide of HPCOL

<220>

<221> CDS

<222> (1)..(66)

<400> 9

atg	tgg	gtg	ctt	ttc	atg	gtg	gca	gct	ttg	cta	tct	gca	ctt	gga	act	48
Met	Trp	Val	Leu	Phe	Met	Val	Ala	Ala	Leu	Leu	Ser	Ala	Leu	Gly	Thr	
1				5				10				15				

aca	cat	ggt	ctt	ttt	gga	66
Thr	His	Gly	Leu	Phe	Gly	
			20			

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<211> 22  
<212> PRT  
<213> Artificial Sequence  
<223> Description of Artificial Sequence:Signal peptide

<400> 10  
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1 5 10 15  
Thr His Gly Leu Phe Gly  
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<210> 11  
<211> 51  
<212> DNA  
<213> Artificial Sequence  
<220>  
<223> Description of Artificial Sequence:Signal peptide

<220>  
<221> sig\_peptide  
<222> (1)..(51)  
<223> Signal peptide of PSHPCOL.

<220>  
<221> CDS  
<222> (1)..(51)  
<223> The cleavage sequence between the two sequences  
coding for PSHPCOL and HPCOL is Ala-Lys.

<400> 11  
atg gag aag atc ctg atc ctc ctg ctt gtc gcc ctc tct gtg gcc tat 48  
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1 5 10 15  
gca 51  
Ala

<210> 12  
<211> 17  
<212> PRT  
<213> Artificial Sequence  
<223> Description of Artificial Sequence:Signal peptide

<400> 12  
Met Glu Lys Ile Leu Ile Leu Leu Leu Val Ala Leu Ser Val Ala Tyr  
1 5 10 15  
Ala

<210> 13  
<211> 32  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial  
Sequence:oligodeoxynucleotide

<220>  
<221> misc\_feature  
<222> (1)..(32)  
<223> Oligodeoxynucleotide used to construct the adapter  
carrying restriction sites PacI, Ascl, mlul and  
HpaI.

<400> 13  
agctgattaa ttaaggcgcg ccacgcgtta ac

32

<210> 14  
<211> 32  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial  
Sequence:oligodeoxynucleotide

<220>  
<221> misc\_feature  
<222> (1)..(32)  
<223> Oligodeoxynucleotide used to construct the adapter  
carrying the restriction sites PacI, Ascl, Mlul  
and HpaI.

<400> 14  
aattgttaac gcgtggcgcg ccttaattaa tc

32

<210> 15  
<211> 523  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> (1)..(523)  
<223> nucleic sequence from Human pancreatic colipase

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acaccagctg tcccactcac catggagaag atcctgatcc tcctgcttgt cgccctctct 60  
gtggcctatg cagctcctgg cccccggggg atcattatca acctggagaa cggtgagctc 120  
tgcatgaata gtgccagtg taagagcaat tgctgccagc attcaagtgc gctgggcctg 180  
gcccgtgca catccatggc cagcgagaac agcgagtgt ctgtcaagac gctctatggg 240

atttactaca	agtgtccctg	tgagcgtggc	ctgacctgtg	agggagacaa	gaccatcgtg	300
ggctccatca	ccaacaccaa	ctttggcatc	tgccatgacg	ctggacgctc	caagcagtga	360
gactgcccac	ccactcccac	acctagccca	gaatgctgta	ggccactagg	cgcaggggca	420
tctctccctt	gctccagcgc	atctcccggg	ctggccacct	ccttgaccag	catatctgtt	480
ttctgattgc	gctcttcaca	attaaaggcc	tcttgcaaac	ctt		523

<210> 16

<211> 1471

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> (1)..(1471)

<223> Nucleic sequence from human pancreatic lipase

<400> 16

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acggaaagac	ccctccatat	attgccttgg	tctccaaaag	atgtcaacac	ccgcttcctc	180
ctatatacta	atgagaaccc	aaacaacttt	caagaagtgg	ccgcagattc	atcaagcatc	240
agtggctcca	atttcaaaac	aaatagaaaa	actcgcttta	ttattcatgg	attcatagac	300
aaggggagaag	aaaactggct	ggccaatgtg	tgcaagaatc	tgttcaaggt	ggaaagtgtg	360
aactgtatct	gtgtggactg	gaaaggtggc	tcccgaactg	gatacacaca	agcctcgcag	420
aacatcagga	tcgtgggagc	agaagtggca	tattttgttg	aattttcttca	gtcggcggtc	480
ggttactcac	cttccaaagt	gcatgtcatt	ggccacagcc	tgggtgceca	cgtgtctggg	540
gaggctggaa	ggagaaccaa	tgggaccatt	ggacgcatca	cagggttgga	cccagcagaa	600
ccttgctttc	agggcacacc	tgaattagtc	cgattggacc	ccagcgaatg	caaattttgtg	660
gatgtaattc	acacggatgg	tgcccccata	gtccccaatt	tggggtttgg	aatgagccaa	720
gtcgtgggcc	acctagattt	ctttccaaat	ggaggagtgg	aaatgcctgg	atgtaaaaag	780
aacattctct	ctcagattgt	ggacatagac	ggaatctggg	aagggaactg	agactttgcg	840
gcctgtaatc	acttaagaag	ctacaaatat	tacactgata	gcacgtcaa	ccctgatggc	900
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ccaagtggag	gctgcccaca	gatgggtcac	tatgctgata	gatatcctgg	gaaaacaaat	1020
gatgtgggcc	agaaatttta	tctagacact	ggtgatgcca	gtaattttgc	acgttggagg	1080
tataaggtat	ctgtcacact	gtctggaaaa	aagggttacag	gacacatact	agttttctttg	1140
ttcggaaata	aaggaaactc	taagcagtat	gaaattttca	agggcactct	caaaccagat	1200
agtactcatt	ccaatgaatt	tgactcagat	gtggatgttg	gggacttgca	gatgggttaa	1260
tttatttggg	ataacaatgt	gatcaaccca	actttaccta	gagtgggagc	atccaagatt	1320
atagtggaga	caaagtgttg	aaaacagttc	aactttctgta	gtccagaaac	cgtcagggag	1380
gaagttctgc	tcaccctcac	accgtgttag	gagactactg	ttatttgacc	aatgaattga	1440
cttctaataa	aatctagtgg	tgatgcaaaa	a			1471